- 1) I vehemently oppose the RM-11392 petition!
- 2) The RM-11392 petition is very bad for the Amateur Radio Service. It is bad for the ability of the service to advance the radio art, and it is bad for the ability of the service to provide the best emergency communications. Both these factors are vital reasons the FCC rules state as reason for existence of the Amateur Radio Service.
- 3) The petitioner misrepresents, either deliberately or by being misinformed, the purposes and intent of manufacturers and users of PACTOR 3 technology. Regulation based on misinformation or inaccuracy is in and of itself bad regulation.
- 4) The RM-11392 petition seeks to destroy digital data technology advancement in the Amateur Radio Service. Advancement of the state of the art is one of the specific statutory justifications for the existence of the Amateur Radio Service! The petition would place more limits than those that already exist, and, as they are, the limitations in the USA by our current rules cause American amateur progress to lag significantly behind many aspects of amateur communications regulations in the rest of the free world.
- 5) The RM-11392 petition's proposed 1.5kHz bandwidth limit on data emission is too narrow for established international standard transmissions and equipment bandwidths used by the Amateur Radio Service. For emergency communications in particular, accuracy is the primary interest and need. The ARQ error-free digital mode requires appropriate bandwidth and could not be used if this petition is allowed to be enacted.
- 6) The RM-11392 petition is an attempt to kill innovation, technology advancement, and emergency data communications in the Amateur Radio Service. Please do not let this happen.
- 7) The FCC Amateur Radio Service's automatically controlled data subbands are already too narrow for the huge volume of traffic that runs on them. If a limit of 1.5kHz bandwidth is applied, it will severely hamper the ability of amateur radio operators to share these small band segments efficiently through rapid data methods.
- 8) There is a huge installed base of Amateur Radio Equipment, and millions of dollars of monetary investment by thousands of Amateur Radio Operators that use HF digital data systems with more than 1.5kHz bandwidths. This investment by FCC-licensed operators would be taken away or rendered useless if the objectives of the RM-11392 petition were to be adopted.

- 9) Several of the primary established HF emergency communications networks currently in service and utilized by thousands of Amateur Radio Operators in USA would be totally eliminated or hobbled if the objectives of the RM-11392 petition were to be adopted. The utility and effectiveness of these emergency communications networks has been demonstrated repeatedly in recent disasters, from snow and ice in Oregon a few weeks ago to Hurricanes Katrina and Rita years ago. Digital communications techniques, such as Winlink 2000, were mentioned specifically in federal documents praising the effectiveness of the amateur radio community in handling record-type traffic after Katrina. This kind of message is very poorly handled by voice (or Morse code) transmission. Approval of this misguided petition would end the capability of the Amateur Radio Service in the USA to engage in such communications, leaving the rest of the world with this high level ability, while crippling those of us in the USA. This CANNOT be allowed to happen.
- 10) The Amateur Radio Service relies upon international communications standards. Many of the present digital data communications standards require bandwidths in excess of 1.5kHz. The normal amateur radio service bandwidth limit by governments of other countries is 6kHz. The Amateur Radio Service in the USA should be able to keep up with communications capabilities allowed in the international community, and regulation by bandwidth rather than by mode should be the model for US federal regulations rather than the antiquated and status quo-serving method in use today, and further advocated by the petitioner.
- 11)Thousands of licensed Amateur Radio Operators would be disenfranchised if the objectives of RM-11392 were to be adopted.
- 12) The RM-11392 petition is comparatively similar to an Analog Cellular Phone service entity trying to eliminate newer Digital Cellular Phone service. The fact is, Amateur Radio is now using faster time-multiplexing digital methods to enable more stations to efficiently use the same frequency channels simultaneously or in rapid succession. These time division techniques require at least 3kHz of bandwidth.
- 13) There is an outdated piece of information on which the petitioner relies that makes claims inaccurate. The firmware for the SCS PACTOR modem on which he based his tests is out of date and has been for quite some time. Petitioner used firmware version 3.6, and the current version is 3.8. The newer firmware improves the performance of PACTOR 3, improving s/n performance, enhancing data rate and robustness and improving spectral efficiency. It gives performance and speed rates improved over what the outdated data from the petitioner's quotations of firmware 3.6 could provide. This illustrates the point that digital communication

techniques are continuing to develop and improve at a rapid rate, and that squelching their development with this petition would do a disservice to the FCC Part 97-stated reason for the very existence of the Amateur Radio Service (namely, the advancement of the radio art). However, this is not just about Pactor and Winlink 2000. This is about growth of any digital protocol of the future and our ability to deploy it. No manufacturer is going to spend money developing future protocols when there is no band space or suitable bandwidth from which to work. This petition's success would mean the end of development of new or improved modes of digital communications. Again, regulation by bandwidth rather than by mode is indicated, and bandwidth must be adequate to work with present digital modes in order to develop improvements that will make spectral use more efficient. Future development will NOT be fostered by making what we currently do illegal!

14) Recent Simulated Emergency Tests (SETs) in different parts of the country were held to test emergency communications interoperability. These tests involved federal, state, and local agencies, including governmental, military, and civilian communicators. The Military Affiliate Radio Service (MARS), which is separate from FCC-regulated amateurs, but which totally utilizes amateur radio operators, was involved. In one demonstration, taking place in Washington, DC, and attended by various civilian and military officials, as well as Senators and Congressmen, many witnessed the effectiveness of digital emergency communications. The interoperability between MARS and amateur stations is a vital part of this linkage. Additionally, 2007 saw numerous other emergency communications exercises in which interoperability between all levels of government and agencies was key. Digital communications played a prominent role in the success of these SETs, and demonstrated the essential nature of accurate, high-speed HF emergency communications. In one exercise, actual conditions as well as exercise conditions made it such that a local EOC's ONLY communication with state EMA and others was via digital methods (Winlink 2000). No other mode worked to transfer information to and from the state and federal authorities. For the sake of interoperable emergency communications, WE SIMPLY CANNOT AFFORD TO LOSE THIS MEANS OF ACCURATE LONG DISTANCE TRANSFER OF IMPORTANT DATA AND RECORDS. One cannot transmit information about repair of emergency generator or census information of a large shelter by voice or CW effectively. Passage of this petition would be disastrously deleterious to emergency communications capabilities and to interoperability. It would result in the opposite kind of post-disaster assessments than what was seen in the Lessons Learned congressional document in which amateur radio in general, and digital record messaging in specific (Winlink 2000) were praised. This petition means taking several steps backward in emergency communications capabilities – all because some misinformed or misguided individuals

mistakenly feel they have the right to be free of interference on amateur bands. Those supporting this petition worry about digital bandwidth, but have made no mention of wanting to narrow the bandwidth of AM or SSB voice signals, either of which is as broad or broader than the digital modes under attack in the petition. This is a fundamental flaw in their reasoning.

15) The RM-11392 petition has not presented a compelling need to change the rules for Automatically Controlled Data Stations on the HF bands. It should be REJECTED!

/signed/ John W Farnham KI4FZT (amateur) AAR4CN (MARS)

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